Amendments to the Claims:

1. **(Currently amended)** A data transmission apparatus carrying out telecommunications with another apparatus via different transmission paths for transmission and reception, the apparatus comprising:

a receiver for receiving a signal transmitted from another apparatus via a transmission path for reception;

a signal processing unit for generating a transmission signal based on transmission data in synchronization with the reception signal received by the receiver;

a transmitter for transmitting the transmission signal generated in the signal processing unit to another apparatus via a transmission path for transmission; and

a phase control unit for adjusting a phase of the transmission signal to set a phase difference between the reception signal received by the receiver and the transmission signal to be transmitted by the transmitter to a predetermined ~~value.~~ value, wherein

the transmission paths are twisted pair cables, and

the phase control unit sets the predetermined value to a phase difference for reducing radiation noise due to crosstalk between a common-mode signal generated in a twisted pair cable for reception and a common-mode signal generated in a twisted pair cable for transmission.

2. **(Original)** The data transmission apparatus according to claim 1, wherein the phase control unit includes:

a phase detection unit for detecting a phase of the reception signal; and

a timing control unit for controlling timing for the signal processing unit to generate the transmission signal in accordance with a detection result of the phase detection unit.

3. **(Original)** The data transmission apparatus according to claim 2, wherein

the phase control unit further includes a phase adjustment unit for adjusting the phase by delaying the transmission signal generated in the signal processing unit by a predetermined amount.

Claim 4 **(Cancelled)**

5. **(Currently amended)** The data transmission apparatus according to claim ~~4~~ 1, wherein

the predetermined value is 90 degrees or 270 degrees.

6. **(Currently amended)** A data transmission met`hod for carrying out telecommunications with another apparatus via different transmission paths for transmission and reception, the method comprising:

a reception step of receiving a signal transmitted from another apparatus via a transmission path for ~~reception,~~ reception;

a generation step of generating a transmission signal based on transmission data in synchronization with the reception signal received in the reception ~~step;~~ step;

a setting step of adjusting a phase of the transmission signal for setting a phase difference between the reception signal received in the reception step and the transmission signal generated in the generation step to a predetermined ~~value,~~ value; and

a transmission step of transmitting the transmission signal whose phase adjusted in the setting step to another apparatus via a transmission path for ~~transmission.~~ transmission, wherein

the transmission paths are twisted pair cables, and

the setting step sets the predetermined value to a phase difference for reducing radiation noise due to crosstalk between a common-mode signal generated in a twisted pair cable for reception and a common-mode signal generated in a twisted pair cable for transmission.

7. **(Currently amended)** A semiconductor integrated ~~circuit,~~ circuit in which a circuit for carrying out telecommunications with another apparatus via different transmission paths for transmission and reception is integrated on a semiconductor substrate, the semiconductor integrated circuit comprising:

a reception circuit for receiving a signal transmitted from another apparatus via a transmission path for reception;

a signal processing circuit for generating a transmission signal based on transmission data in synchronization with the reception signal received by the reception circuit;

a transmission circuit for transmitting the transmission signal generated by the signal processing circuit to another apparatus via a transmission path for transmission; and

a phase control circuit for adjusting a phase of the transmission signal to set a phase difference between the reception signal received by the reception circuit and the transmission signal to be transmitted by the transmission circuit to a predetermined ~~value.~~ value, wherein

the transmission paths are twisted pair cables, and

the phase control circuit sets the predetermined value to a phase difference for reducing radiation noise due to crosstalk between a common-mode signal generated in a twisted pair cable for reception and a common-mode signal generated in a twisted pair cable for transmission.